**Writeup For Project 2**

1. What were some challenges you faced while making this app?
   1. There were so many challenges.
      1. Designing the structure of the app was really challenging. For example, nesting the components, how do I pass the props down, how do I manage the useStates, I even tried learning useEffects, and also tried learning how to use Array.from and .map(). These concepts were not really covered in class but I saw how so many developers were constantly using these tools to help them and I ended up trying to learn them since learning how to be a web developer would extend beyond what happens in the classroom anyway.
      2. Creating the whole app from scratch. This was another really big challenge, I was really intimidated by how we had to create multiple web pages, making it look good, making sure it also works on the mobile environment was also not easy. There was so much to learn and experiment with.
2. Given more time, what additional features, functional or design changes would you make?
   1. Well I did not manage to make the heatmaps, that’s something I would do.
   2. I think I would improve on my design and polish up the app so that it works based off what my app can do and not what the homework specs say it can do. Right now, I just wrote the rules of GameOfLife based off what we were told to write in our homework spec, but it’s not really what my app can do right now.
   3. I would try to make the grid more pretty, like maybe adding a background theme to the grid like a wooden board or something to just make it more interesting.
3. What assumptions did you make while working on this assignment?
   1. I assumed that I would be able to do this with just the knowledge and practice we were exposed to in class but that was very inaccurate. Although the fundamentals of the concepts were covered in class, I really needed to learn a lot more on my own and really learn by experiment and breaking things. It was very frustrating to be honest but somehow it got better as I got to understand the concepts better.
4. How long did this assignment take to complete?
   1. This assignment took me a lot of hours, I would say at least 30 hours and even then, I did not manage to complete it as much as I wanted to. However, I thoroughly enjoyed the process of working on this project. I was forced to explore a lot of different tools and resources. I think one of the best things I enjoyed was learning how to read documentation and understanding the concepts we are learning on a much deeper level.
   2. I also have to admit that I did use a lot of studying in Stack Overflow, multiple blogs, Geeks for Geeks, Youtube – Ben Awad and chatgpt. I used a lot of resources and learned a lot and got really excited to try and experiment more.